

REMARKS

Applicants conducted a telephone interview with the Examiner on February 18, 2010 and Applicants thank the Examiner for the time and courtesy extended during the interview.

During the interview, the substance of the rejection was discussed. Applicants discussed proposed amendments that reflect that the oxidation-active component is on a first support material of homogeneous Mg/Al oxide and the NO_x storage component is on a second support material of homogeneous Mg/Al oxide, where the catalyst exhibits unexpectedly improved thermal durability, which is not made obvious by US 2003/0125202 (Ruwich '202) and US 6,350,421 (Strehlau).

Applicants also discussed Table 3 of the application where claimed catalyst C1 current catalyst had superior results in efficiency and thermal stability when compared to CC1 (see Figure 3), and that claimed catalysts C3 and C5 had superior results in efficiency and thermal stability when compared to CC4 (see Figure 5) and possibly submitting declarations to these effects. Applicants also discussed filing a petition to withdraw the Terminal Disclaimer filed on August 17, 2009, in view of the amendments.

By this amendment, Applicants have amended the claims consistent with the interview. Claim 1 has been amended to include the features that the nitrogen oxide storage catalyst comprises platinum as an oxidation-active component on a first support material comprising homogeneous magnesium-aluminium mixed oxide having a magnesium oxide content of from 1 to 40% by weight, based on the total weight of the Mg-Al mixed oxide of the first support material and at least one nitrogen oxide storage component is disposed on a second support material comprising Mg-Al mixed oxide doped with rare earth oxides and containing from 1 to 30% by weight of magnesium oxide, based on the total weight of the magnesium-aluminium mixed oxide of the second support material. Support for the amendments to claim 1 can be found at, for example, at paragraph 3 discussing the oxidation active component in conjunction with paragraphs 10-12 discussing the nitrogen oxide storage material and claim 14 of the published application US 2009/0062117. Claim 2 has been amended to include the features of

original claim 4 and paragraph 18. Claim 3 has been amended to include the features of original claim 2. Claim 4 has been amended to include the features of original claim 3. Claim 5 has been amended to include the features of original claim 5 and clarifying the support material. Claims 8 and 9 have been amended to depend on claim 1. Claim 13 has been amended to depend on new claim 15. New claim 15 has been added, which corresponds to original claim 12. Claims 7 and 11 have been canceled. These amendments do not add new matter. Applicants respectfully request entry of these amendments and allowance of the pending claims.

I. Withdrawal Of Terminal Disclaimer

Applicants have filed with this response, a Petition to Withdraw The Terminal Disclaimer filed in the above-identified case on August 17, 2009 pursuant to 37 CFR 1.182 in view of U.S. Patent No. 6,858,193.

II. Response to Rejections of Claims Under 35 U.S.C. §103(a)

Claims 1-5, 7-11 and 13 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over US 2003/0125202 (Ruwich '202) and US 6,350,421 (Strehlau). Applicants respectfully traverse these rejections.

The Applicants respectfully submit that the cited prior art does not render the present claims obvious, as one of ordinary skill in the art would not combine the references in the manner that the Examiner applies them and the combination fails to make obvious every element as required.

Applicants have amended the claims to include that the oxidation-active component is on a first support material of homogeneous Mg/Al oxide and the NO_x storage component is on a second support material of homogeneous Mg/Al oxide. The claimed nitrogen oxide storage catalyst exhibits unexpectedly improved thermal durability, which is not made obvious by US 2003/0125202 (Ruwich '202) and US 6,350,421 (Strehlau).

The Examiner alleges that at paragraphs 16, 42-44 and 46, Ruwisch '202 teaches a NO_x storage catalyst comprising Mg-Al mixed oxide support material doped with rare earth oxides and comprising a NO_x storage material supported thereon, wherein the mixed oxide contains MgO within the claimed range (Final Office Action, page 3). Applicants respectfully disagree. While Ruwisch '202 lists homogenous Mg-Al mixed oxide material for the oxidation component containing Pt, Ruwisch '202 does not disclose or make obvious using Mg-Al mixed oxide as a second support material for the nitrogen oxide storage component as currently claimed (see declarations of Dr. Wittrock and Dr. Gobel at paragraphs 13 and 14).

Further, Ruwisch '202 does not make obvious the unexpected thermal durability that the inventors have discovered when they used the oxidation-active component (e.g., Pt) on a first support material of homogeneous Mg/Al oxide and used the NO_x storage component (e.g., BaO) on a second support material also containing homogeneous Mg/Al oxide.

In support of this position, Applicants submit the declarations of Dr. Wittrock and Dr. Gobel, both co-inventors of the above-identified application, describing the catalysts in Table 3 and the unexpected thermal durability results in Figure 3 of the claimed catalyst C1 (containing first and second support material containing homogeneous Mg/Al oxide) when it was compared to a comparative catalyst CC1 that had a first support material containing homogeneous Mg/Al oxide, but did not have the nitrogen oxide storage material containing BaO supported on a second support material of homogeneous Mg/Al oxide (see declarations of Dr. Wittrock and Dr. Gobel at paragraphs 9 and 10).

The inventors also compared the claimed catalysts C3 and C5 (first and second support material containing homogeneous Mg/Al oxide) to a comparative catalyst CC4 that had a first support material containing homogeneous Mg/Al oxide. In CC4 the nitrogen oxide storage component containing BaO was supported on Ce-Zr oxide as the second support material. The results are shown graphically in Figure 5. The claimed C3 and C5 catalysts unexpectedly had improved thermal durability and NO_x storage efficiency compared to the catalyst CC4 that does not have a second support material

containing homogeneous Mg/Al oxide (see declarations of Dr. Wittrock and Dr. Gobel at paragraphs 11 and 12).

Like Ruwisch '202, Strehlau does not make the current claims obvious. Strehlau does not describe the unexpected thermal durability that the inventors discovered when they used the oxidation-active component on a first support material of homogeneous Mg/Al oxide and used the NO_x storage component on a second support material also containing homogeneous Mg/Al oxide. Therefore, Strehlau does not make the claims obvious. (See declarations of Dr. Wittrock and Dr. Gobel at paragraph 16)

Applicants respectfully submit that one would not combine Ruwisch '202 and Strehlau together the way the Examiner does. Even if one were to combine the references together, Ruwisch and Strehlau do not make obvious the unexpected thermal durability that the inventors discovered when they used the oxidation-active component on a first support material of homogeneous Mg/Al oxide and used the NO_x storage component on a second support material also containing homogeneous Mg/Al oxide.

Accordingly, Ruwisch '202 and Strehlau, alone or in combination do not make the currently pending claims obvious and Applicants respectfully request withdrawal of this rejection.

III. Conclusion

Reconsideration and allowance are respectfully requested. No fee other than the enclosed fee for a Request for Continued Examination is believed to be due with respect to the filing of this Response.

If any further fees are deemed due, or an overpayment has been made, please charge, or credit, Deposit Account No. 11-0171 for such sum. If the Examiner has any questions regarding the present application, the Examiner is cordially invited to contact Applicant's attorney at the telephone number provided below.

Respectfully submitted,



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